



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,470	01/15/2004	Aaron T. Becker	P06674US0-5213	5862
34082	7590	08/09/2005	EXAMINER	
ZARLEY LAW FIRM P.L.C. CAPITAL SQUARE 400 LOCUST, SUITE 200 DES MOINES, IA 50309-2350			LOPEZ, FRANK D	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/758,470	Applicant(s) BECKER, AARON T.	
	Examiner F. Daniel Lopez	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/3/04</u> . | 6) <input type="checkbox"/> Other: ____. |

Specification

The disclosure is objected to because of the following informalities: Throughout the specification the notch 28 is characterized as having an irregular cross sectional area (e.g. page 4 line 10-11). The drawings (e.g. fig 3) show and the specification (e.g. page 4 line 12-13) supports that the notch tapers inwardly to a point, and compares this to the prior art, which has a rectangular notch. A tapered surface is a regular shape, and therefore one of ordinary geometric skill would be confused as to how it can be characterized as being irregular. Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 1-8 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 line 4-5 "variable irregularly shaped metered porting notch" is not supported by the specification, since there is no mention of the notch being variable. In claim 1 line 4-5 "irregularly shaped metered porting notch", and claim 4 line 5 and claim 5 line 4 "irregularly shaped servo drain metering porting" are confusing, for the reason discussed above in the objection to the specification. Note that it is unclear what shapes would be irregular and what shapes are not irregular.

In claim 1 line 5-6 "servo piston drain of the piston" and claim 4 line 6 "servo drain of the piston" is confusing as to how the drain is part of the piston.

Claim 4 is incomplete, since it ends with a semicolon, not a period; and there appear to be some limitations missing.

Claims not specifically mentioned are indefinite, since they depend from one of the above claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, inasmuch as they are definite, are rejected under 35 U.S.C. § 102(b) as being anticipated by Roeske. Roeske discloses a variable displacement axial piston pump (11) in a closed circuit, controlled by rotary spool valve (140) disposed partially in a spool sleeve (115), wherein the rotary spool is connected to a charge pump (31) and a drain (30) and has servo fill and servo drain metering ports (147, 145); wherein the rotary spool is rotated to create an error signal and the control sleeve is rotated to remove the error signal; and where the cross section of the drain port is round (i.e. not rectangular).

Claim 4, inasmuch as it is definite, is rejected under 35 U.S.C. § 102(b) as being anticipated by either Morin et al or Forster (see discussion below). Morin et al discloses a rotary spool valve (25) having a tapered (see e.g. fig 3) servo drain metering port (40) fluidly connected to a drain (37). The closed hydrostatic circuit is considered intended use and is therefore given no patentable weight.

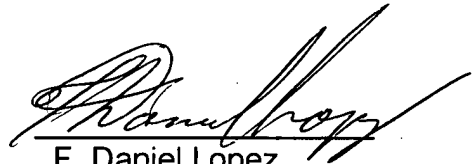
Claims 1-3 and 5-8, inasmuch as they are definite, are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over Forster. Forster discloses a variable displacement axial piston pump (1) in a hydrostatic transmission (column 1 line 25-27), controlled by rotary spool valve (51) disposed partially in a spool sleeve (52), wherein the rotary spool is connected to a charge pump (62) and a drain (63) and has servo fill and round (i.e. not rectangular) servo drain metering ports (60, 61); wherein the rotary spool is rotated to create an error signal and the control sleeve is rotated to remove the error signal. Inherently, hydrostatic transmissions are closed circuit. If not, one of ordinary skill would understand that hydrostatic transmissions can be made as closed circuits.

Art Unit: 3745

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

A handwritten signature in black ink, appearing to read 'F. Daniel Lopez', is written over a horizontal line.

F. Daniel Lopez
Primary Examiner
Art Unit 3745
August 5, 2005